

6. The meta-implementation layer of claim 1, wherein said plurality of descriptors include at least one hint descriptor.

7. The meta-implementation layer of claim 6, wherein said plurality of implementations includes at least one hint implementation associated with said hint descriptor.

8. The meta-implementation layer of claim 1, wherein said plurality of descriptors include at least one datatype descriptor.

9. The meta-implementation layer of claim 8, wherein said plurality of implementations includes at least one datatype implementation associated with said datatype descriptor.

10. The meta-implementation layer of claim 1, wherein said plurality of descriptors include at least one constraint descriptor.

11. The meta-implementation layer of claim 10, wherein said plurality of implementations includes at least one constraint implementation associated with said constraint descriptor.

12. The meta-implementation layer of claim 1, wherein said plurality of descriptors include at least one attribute descriptor.

13. The meta-implementation layer of claim 12, wherein said plurality of implementations includes at least one attribute implementation associated with said attribute descriptor.

14. The meta-implementation layer of claim 1, wherein said plurality of descriptors include at least one otherelement descriptor.

15. The meta-implementation layer of claim 14, wherein said plurality of implementations includes at least one otherelement implementation associated with said otherelement descriptor.

16. The meta-implementation layer of claim 1, wherein said plurality of descriptors include at least one parameter descriptor.

17. The meta-implementation layer of claim 16, wherein said plurality of implementations includes at least one parameter implementation associated with said parameter descriptor.

18. The meta-implementation layer of claim 1, wherein said plurality of descriptors include at least one method descriptor.

19. The meta-implementation layer of claim 18, wherein said plurality of implementations includes at least one method implementation associated with said method descriptor.

20. The meta-implementation layer of claim 1, wherein said plurality of descriptors include at least one signal descriptor.

21. The meta-implementation layer of claim 20, wherein said plurality of implementations includes at least one signal implementation associated with said signal descriptor.

22. The meta-implementation layer of claim 1, wherein said plurality of descriptors include at least one interface descriptor.

23. The meta-implementation layer of claim 22, wherein said plurality of implementations includes at least one interface implementation associated with said interface descriptor.

24. The meta-implementation layer of claim 1, wherein said plurality of descriptors includes at least one model descriptor.

25. The meta-implementation layer of claim 24, wherein said plurality of implementations includes at least one model implementation associated with said model descriptor.

26. The meta-implementation layer of claim 1, wherein said plurality of descriptors include at least one package descriptor.

27. The meta-implementation layer of claim 26, wherein said plurality of implementations includes at least one package implementation associated with said package descriptor.

28. The meta-implementation layer of claim 1, wherein said plurality of implementations include at least one accessor.

29. The meta-implementation layer of claim 28, wherein said plurality of implementations include a plurality of accessors and wherein said plurality of accessors includes at least one selected accessor associated with at least one descriptor and at least one implementation.

30. The accessor of claim 29, wherein said selected accessor participates in said meta-implementation layer as an enumeration implementation, role implementation, hint implementation, datatype implementation, constraint implementation, attribute implementation, otherelement implementation, parameter implementation, method implementation, signal implementation, interface implementation, model implementation, or package implementation.

31. The meta-implementation layer of claim 1, wherein said meta-implementation layer is stored in a computer system.

32. A component integration engine comprising:

- a meta-implementation layer for allowing a user to have access to software components of a software program;

- a plurality of component integration instances for providing access to software component instances to thereby allow said software component instances to be assembled in said software program;

- communication means for allowing said user to communicate with said component integration engine; and

- assembly means for assembling said component integration instances to build said software program.

33. The component integration engine of claim 32, wherein said meta-implementation layer comprises:

- a metamodel repository containing a plurality of descriptors;

- a plurality of implementations for providing access to said software components described by said plurality of descriptors;

- a metamodel repository including a plurality of metamodel descriptors for describing said descriptors and a plurality of metamodel implementations for describing said implementations, wherein said meta-implementation layer provides access to an implementation of said plurality of implementations to thereby allow said user to have access to said software components of said software program.

34. The component integration engine of claim 32, further comprising an authentication means for verifying the identity of said user and for verifying that said user has permission to use said component integration engine